California Indians

Introduction

Because children find the culture so appealing, California Indian programs can be one of the most meaningful Junior Ranger subjects to interpret. Take the children back in time, and help the Junior Rangers envision California the way it was for the California Indians.[1]

An interpreter can emphasize many different topics related to the local Indian culture. Included here is a sample program about what the people ate and about the respectful relationship between the people and animals. However, you can present California Indians in many other ways. If you take advantage of these possibilities for variety, even a Junior Ranger who has already completed a California Indian program can repeat the section and have a completely different experience the second time.

One effective way to interpret this subject is to include opportunities for Junior Rangers to participate in native lifestyle activities. Children will be curious about the early uses of plants, and an activity such as making acorn mush will help participants imagine what it would be like to gather and prepare their food from what can be found in the immediate environment. As Junior Rangers find out about the medicinal uses of plants, they will be able to see how, even today, we are dependent on the plant world to provide us with important resources.

California is a large state, and the environment varies widely from place to place. Since people adapted their lifestyle to the environment and used materials at hand to sustain their way of life, specific lifestyles differed from the mountains to the valleys, and from the coasts to the desert regions. Although the following information applies in a general way to most California Indians, we encourage you to find out about the people who lived (and may still live) near your park. Tailor your program so it focuses on the local tribe, its customs and stories. Also try to stress regional differences

[1] All American Indian groups have names that mean "the people." In the spirit of this tradition, California Indians will often be referred to in this section as "the people." A good reference is Dolan H. Eargle Jr.'s *Native California Guide: Weaving the Past & Present*, (San Francisco, CA: Trees Company Press, 2000).

between tribes. Please do not assume that all the information given in this section is true for all Indian groups.

A California Indian program should be taught with sensitivity. Here are some suggestions:

- In your program, it is important to find out about the specific group or groups of Indians who traditionally lived, and still do, closest to your park. Avoid saying, for example, "Indians pounded acorns." Say instead, "The Maidu pounded acorns."
- Although you may be speaking mostly of the people in a historic sense, be sure you don't leave the impression that there are no California Indians left. You might say, "The Maidu once lived on or used this park site. Today, some Maidu people live in the nearby city of _____. "
- Make sure everything you say about the people is accurate and verifiable by at least one of the tribes in the local vicinity. Some of the information you have heard about California Indians may not be correct, and to repeat it may reinforce stereotypes. Note: the information in this section has been checked for accuracy by California Indian Charles Smith (Concow/Maidu).
- Use discretion in wearing Native American clothing. You might want to ask a local California Indian to speak with your group instead.
- It is better not to teach about the Native Californians' religious beliefs, except in the most general of terms.
- Have fun with this program, but make sure the information you give is historically accurate and respectful as well.

Interesting California Indian Facts

- Christopher Columbus found out about America 500 years ago. Scientists place the first native people in California thousands of years ago! (Most California Indians, however, say they have been here from the beginning of time).
- Scientists theorize that the first Californians came from Asia, across the Bering Strait. This land bridge was 1300 miles long—that's like walking from Seattle, Washington to San Diego, California![2]
- Researchers believe that some California Indians had to spend only two hours a day on survival activities (food, clothing, and shelter).
- In some areas, the nets used to snare quail were made of women's hair.

[2] Although some recent studies call the Bering Strait theory into question, it is still the most widely accepted theory.

Research Questions

A good interpreter knows his/her subject. Be able to answer the following questions for the Junior Rangers.

1. What group or groups of Indians inhabited (or inhabit) your area?
2. What area did they traditionally live in prior to European occupation of California? When did they live here?
3. How did these people relate to their environment and what was their impact on it?
4. How do we know they were here? What physical evidence remains?
5. Material culture and economy:
   - ·What did these people traditionally eat? How did they obtain, prepare and store their food?
   - ·What did they wear? How did they obtain their clothing?
   - ·What type of shelter did they have?
   - ·Were they involved in trade with other groups?
   - ·Did they have a seasonal migration pattern?
6. What were the other elements of their lifestyle: social structure, arts and crafts, ritual activities, games, music, etc?
7. Compare how they did things with how we do the same types of things today.
8. How did the California Indians in your area relate to the influx of explorers and pioneers?
9. Where are they today?

Sample Program: California Indians

I. Introduction
   Introduce yourself.
   Introduce the Junior Ranger Program.

II. Objectives
   Today, we're going to learn about the people who lived in California before the Gold Rush, before the Spanish missions, before Cabrillo first sailed to California and even before Columbus found out that America exists. We're going to find out what foods they ate in this area and how they prepared them. We'll also learn about the respectful relationship between the California Indians and animals, and what we can learn from that relationship.

III. Focus the Group
   A. To get the group in the mood to think about what it was like to be a California Indian prior to the encroachment of Europeans, take the group back in time:
   B. Imagine California as it was hundreds of years ago, when the only people who lived here were the California Indians. Let's step into the past, and imagine

what life was like for them. First, we have to take away in our mind's eye all the things that weren't here 250 years ago. Close your eyes, and imagine your home town area without buildings and without roads. Take away, in your mental picture, all the contemporary houses, all the supermarkets and stores, all the businesses and gas stations. Imagine what your home town would look like if it were all just land. Hold that picture in your mind, as you open your eyes.

C. If possible, show old photos of your area from local historical collections to compare with the area today.

IV. Inquiry/Discussion

A. How did the people find food?

1. Now, think about how you would survive if you lived on that land. You couldn't go to the supermarket and get food. What would you eat and drink?
2. Find out what California Indians in your area traditionally ate. Talk to the Junior Rangers about hunting, gathering, and fishing, and how the local tribe prepared their food.
3. Was food readily available in your area? Why?
4. Was there much water?
5. How did children help parents gather and prepare food? How do you help your parents?
   - Tactile experiences capture kids' interest and reinforce the lesson material. Bring in roasted and unroasted pine nuts for the kids to sample, or let them try pounding acorns with a mortar and pestle. If you're ambitious, you could try making acorn mush, soup, or bread and bringing it in for the group to sample. For the adventurous, buy meal worms from feed stores and roast them. They're nutty and crunchy!
   - If you have oak trees in your park, you may want to take the kids on an acorn hunt, or if you have pines, you might want to show them where you find pine nuts in a cone. Another option would be to find plants in your park that were also a food source, or look for insects that the people enjoyed. Point out that even today we could live on insects, plants, etc.—if we weren't so picky!
6. Activity: Cross Cultures List worksheet (Appendix B)

B. The People and animals

1. Where do you usually see animals?
   Encourage participants to share the times they see animals—in their backyards, in the state park, in the zoo, at home (pets).
2. California Indians lived with many animals all around them. The people imitated animal motions in their dances, and each clan had a special animal that represented them.
   a. If you had a special animal that represented your "clan" (you and your family or maybe you and your closest friends), what would it be? Which characteristics of the animal remind you of your family?

b. Encourage participants to share the animal that would represent them, and why.

3. Still Hunting Activity (see activity section below)

C. Hunting and Respect for Animal Life

1. California Indians hunted animals. However, they killed—or selectively took—only what they needed and used all parts of the animals. The animal was used for food, its skins were used for clothing and bedding, and its bones became tools. If an Indian killed a deer, and had more than he needed, he would trade it. Someone who wanted some deer meat would trade another item such as acorns or obsidian for it. In this way, there was never a shortage of animals. Many California Indians today believe that their ancestors watched the number of animals carefully. If they noticed the salmon population getting low, for example, they would eat something else rather than endanger the salmon population.
   a. How would you hunt without modern weapons?
2. Activity: To learn how to hunt, California Indian children threw spears through hoops. Try throwing dowels through a small hoop.

D. Stories and Legends

1. California Indians did not have writing, so the people told stories to teach their children. Listen to this California Indian story, and try to guess why the people told it to their children.
   a. Read to the group the story "The Woman Who Was Not Satisfied." (See next page.)
   b. What do you think the people want children to learn from this story? To teach young people to protect animal populations by not killing more animals than they needed for food.

V. Application/Conclusion

A. What happened to the California Indians?
   European and Mexican people invaded the land California Indians had lived on. Many people died from diseases carried by newcomers to the state. Others were killed. Some lived in the missions. The ones who escaped these fates could not live in the traditional ways anymore. Descendants of the people who did survive, however, continue to keep many of the traditions of their ancestors alive today.

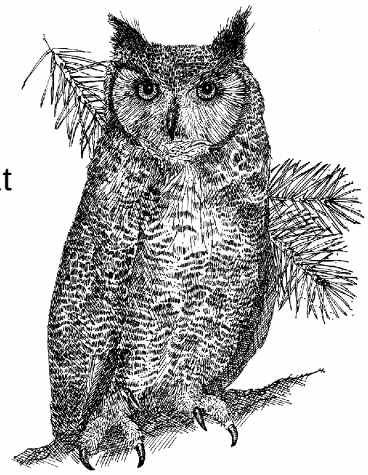
B. Discuss which California Indians groups are active in your area today.

C. How should we treat people who are different from us?

D. Stamp logbooks.

E. Announce time and topics of the next Junior Ranger program and other interpretive programs.

Story: The Woman Who Was Not Satisfied



"One time a man and his wife had been traveling for a great distance. Sun was going down to rest when they decided to camp in a cave until Sun woke and rose for the new day.

They were very hungry, but there was no food in the cave and that which they carried was gone.

As they made their fire, they heard the song of the horned owl a little way away from them.

The wife turned to her husband, and said, 'When Owl comes near, you can shoot him and we can eat him for supper.'

The husband then got his bow and his arrows which had the tiny obsidian points used for hunting birds. When he was ready, he sang out the same way as the owl.

Owl, thinking it was one of his cousins, returned the husband's call and came closer. The husband sang out again and when Owl answered the husband knew where Owl was, and he shot one of his arrows and, being a good hunter, he had meat for his supper.

Then he said to his wife, 'There is enough for now.'

'No!' said the wife, 'We have had no meat for a long time. We shall want meat for tomorrow as well, for we have far to go. And if you call them when Sun comes up, they will not come.'

The man heard his wife and again, taking his bow and arrows, called out for more owls. The husband began shooting his arrows as fast as the owls came. But there were more owls than arrows and still they came in great numbers.

Soon they covered everything, making Night Sky, filled with bright stars, darker than before. The husband covered his wife with a blanket and fought the owls with burning sticks from Fire. But there were too many. Then they overcame the husband and wife.

And this is the way the owls paid back the greedy husband and wife for the death of their cousins."

Based on a Yokuts story. Legend of the Northern California Indians, printed in the Humboldt County Office of Education N.I.C.E. program. Quoted in Whispers of Our Past.

Activities

Still Hunting

Number of Children: One or more
Environment: Any secluded location
Purpose of the Activity: Learning serenity, spotting wildlife
Activity:

1. An Indian, when still hunting, would go to a place he was attracted to and sit there quietly, allowing his mind to settle into a still and watchful mood. He would be still, and watch the creatures around him return to their normal routine. Usually, an Indian went still hunting to observe and to learn.
2. When you go still hunting, let your sitting place choose you. Remain perfectly motionless, and become a part of the natural surroundings. Curious animals may come look at you and get very close if you are still, and you will have an opportunity to observe nature as it is when you aren't there.
3. After the still hunt, come back to the group and share your experiences: feelings you had, what you saw. Encourage a respectful and sensitive mood, an atmosphere in which real communication of feelings and experiences can happen.
4. Talk about what it feels like to be a part of nature.

From Sharing Nature With Children, by Joseph B. Cornell. 2nd edition. Nevada City, CA: DAWN Publications, 1998.

Acorn Tops

Number of Children: One or more
Environment: Any
Materials Needed:

Wooden dowels 1/8" diameter cut into 1½ inch long segments (24 segments on a 36" dowel)

Large, well-shaped acorns, without caps (Tanoak acorns work well)
Brown molding clay (A pea-sized amount for each top)
Sharp, small knife or Exacto knife.

Purpose of the Activity: To demonstrate a toy that was made by California Indians out of natural materials.

Activity:

1. Using an Exacto knife, remove the center core out of the acorn. Enough of the shell and the meat needs to be removed from the top so that ½" of the dowel can be inserted into the acorn. The leader should pre-cut the acorns so the Junior Rangers won't hurt themselves doing it.
2. Have the Junior Rangers pick out an acorn. Instruct them to insert the dowel, and then tightly pack the clay into the hole.

3. Let the Junior Rangers practice with the tops, and then have a contest to see who can make their top spin the longest!

Recipe for Acorn Bread

1. Shell dry acorns.
2. Use a blender to grind acorns into fine flour.
3. Put acorn flour into a muslin-lined colander (cheesecloth is too porous). Place the colander in the sink and run warm water through the flour until the bitterness is gone (stirring gently will speed this slow process).
4. Salt may be added, if desired.
5. Shape flour into pancake-like patties (about 1½ inches in diameter and ¼ inch thick) while flour is still moist.
6. Fry without oil on non-stick pan (at campouts, acorn bread may be cooked on hot rocks from campfires).
7. This flour may be used in place of regular flour in cookie recipes. In cookie recipes that call for 2½ cups of flour, substitute ¼ cup of acorn flour for ¼ cup of regular flour. The acorn flour can also be dried and stored in the freezer.[3]

To remove tannin from shelled acorns:

1. Place shelled raw acorns in boiling water, and continue to boil until the water is the color of strong tea.
2. Pour the water and nuts through a colander.
3. Place the acorns in more water and continue above process until water boils clear. This process removes tannin from the acorns.
4. Allow nuts to dry. Spread acorns to dry on cookie sheets - put in warm place (oven, if pilot light is used). When partially dry, coarse grind a few at a time in blender. Spread to dry on cookie sheets, then grind again in blender or cuisinart.

- Use ½ cup acorn flour for ½ cup regular flour in cookies, zucchini bread, etc.

Note: Contact your local Indian groups for recipes also.

More Interpretation Ideas

- If you have access to California Indian artifacts or replicas, ask the group to guess how they think the artifacts were used. Then ask if people in the future found some things from a Junior Ranger's closet or kitchen, what could they learn about that child from what he or she left behind? Would it be easy or difficult for people in the future to find out about the person from, say, his or her bicycle? Discuss how artifacts help us understand the California Indians' lifestyle, but also how it takes a special effort to understand the people who used the objects you see in

[3] Modern version. Recipe provided by Rita Nunes.

museums. (Note: Please consult museum collections staff and/or archaeologists before using artifacts.)

- Ask the Junior Rangers to go out into the open and imagine that you had to make a house out of what you see there, using only the tools that you could find or make. How would you build your house without a hammer and nails? What kind of shape would it have? What would hold it together? Would it keep out the rain? The snow? The heat? Would it stand in a strong wind? Would it have ventilation? How would you make the door? Then tell the group how the people who lived on or near the park site built their houses. Think about how much skill they had to have to build such houses, and how they adapted to the environment. (At the same time, you can dispel the myth that all Indians lived in tepees).
- Try basket weaving, and discuss the California Indians' ability to weave baskets that could hold water without leaking.

Suggested Program Aids

Baskets, grinding implements (mortar, pestle, etc.), projectile points, ornaments, plant materials (acorns, pine nuts, berries, rushes, etc.), musical instruments, tools (pump drill, bone, antler, chipped stone, fishing implements, etc.), equipment for games, drawings, reprints of photographs, and maps. Note: Before using original artifacts, make sure your supervisor has cleared their use with your district's collections manager. The use of reproductions is encouraged.

Background Information: California Indians

The California known to the people who lived here over 250 years ago was very different from the California we know today. Before contact by Europeans, there were thousands of people within the present boundaries of the State of California, a diverse population that spoke 120 different languages. At that time, the people were relatively few and the animals were many. California was abundant in natural resources (the useful plants, trees, animals, fish, water and minerals that are a part of the land). The California Indians used these materials in creative and resourceful ways, and they took care of what nature had given them.

Hunting and Fishing

Because the people had great respect for animal life, hunting was given much forethought, marked by ritual. In many tribes, men would meet in a sweathouse (a partly underground building roofed with poles, mats, earth and clay) to prepare for the hunt. In the sweathouse, bows, snares, nets and traps were sometimes made and mended. Stories of the past were told, and boys learned the skills and traditions they needed to survive. When the hunter came out of the sweathouse, he scraped sweat

from his body with a deer or elk rib tool, then washed in a nearby stream. In this way human scent was removed so that the hunter could approach his quarry more closely. Some men also rubbed herbs on their bodies to disguise their scent. The sweathouse was also a way to purify oneself spiritually before hunting, dancing, gambling, or other important ventures. Sometimes the people disguised themselves with animal skins and acted like animals so they could get close enough to shoot their prey with an arrow. Animals were caught in traps, netted, speared, and shot with bows and arrows. Great care went into the preparation of the bows and arrows and the obsidian arrow tips.

Often men hunted at night because certain animals could be found in their dens or nests. In some areas, quail were caught with snares woven from women's hair. Other kinds of small birds were caught in large drop or fan-style nets.

Fish were a very important food source—especially salmon—but the people also ate eels, clams, and crayfish. In some areas, both men and women fished together, from the shore or from boats (note: in some areas women were not allowed to fish unless attended by a male). They used hooks, nets, harpoons, traps, spears, and poison. If the fish were in a pool, some people put ground-up soaproot powder into the water. This had the effect of stupefying the fish, causing them to float to the top, where they could be easily caught. The fish were broiled over hot coals, or dried and made into meal. Dried salmon could be used for trade.

Houses

California's rich variety of natural materials supplied the things the people needed to build their houses. They used earth, wood, brush, and reeds to build their homes, and also used natural materials to make their clothes and baskets. These varied from region to region depending on the available materials and climate.

Some California Indians (the Wintun, the Mono, and the Maidu, for example) built houses out of cedar bark slabs covered with animal hides and shaped like an upside down cone. The homes had a hole in the center of the roof for the smoke of the cooking fire inside to escape. Their beds were made of pine needles or fir branches covered with blankets made of rabbit fur. Other Indian tribes built their homes of planks, especially in the far north (Yurok, Tolowa, Hupa, and Karok).

In the valley, coast, and desert regions, most homes were built using tules or brush. Oblong or round in shape, this type of house was made by curving willow poles over a pit. The frame was covered with brush or tule and tied with cord. A small opening at the top of the brush hut allowed smoke to escape.

Throughout California, earth coverings were used over brush houses. The earth kept the home cool in the summer and warm in the winter. Sometimes plants would grow in the earth and camouflage the house.

In addition to dwellings, the people built sweathouses and a ceremonial house (or round house) for dancing and other social and spiritual/religious events.

Clothing

Some California Indian women wore full skirts which fell to a few inches above the knee. The skirts were made out of deerskin, rushes, or shredded bark (from willow, cedar, or redwood trees). They sometimes wore their hair parted in the middle and in two braids, or with the braids tied in the back with rabbit, mink, or other fur.

Most California Indian men wore an apron belt of deer hide. Their hair was worn long, in a brush tied at the nape of the neck, or worn on the top of the head in a fine net. Children under ten years old generally wore no clothing.

Both men and women wore feather or fur capes when it was cold, and sandals and moccasins for wet or snowy days.

Food

The people found everything they needed for food in the wild. Acorns were an important staple, but they also used over 500 other types of plants for food, including roots, bulbs, nuts, seeds, greens, and berries.

There were many kinds of oak trees in California, and all had edible acorns, although some were preferred over others. In the fall or summer, the people gathered acorns. They knocked the acorns out of the tree with a long stick, and then gathered them in baskets. The women prepared the acorns for eating, singing and telling stories as they did so, for it was a very social time. The first step was to split the shells off the acorn with a rock. Next, the women winnowed away the skin of the acorn by tossing the acorn kernels in the air and allowing the wind to blow the skins away. The next step was to pound the acorn kernels with a stone pestle in holes worn in a big slab of bedrock, or in a wood or stone mortar. In some areas, such as Indian Grinding Rock State Historic Park in Pine Grove, California, you can still see the places in the rock where the California Indian women once pounded acorns.

After the acorns were pounded into flour, the bitter tannic acid had to be leached from them. To do this the women took the flour to a sandy spot by a creek or river. They scooped out a shallow basin in the sand, lined the rim with pine needles, and placed the flour in the basin, right on the sand. They slowly poured warm water through the flour until all the bitterness washed away. After leaching, the dough was either cooked into mush, soup, or bread, or dried and stored. Acorn meal was cooked in baskets, pottery bowls (desert areas) or soapstone bowls (along the coast).

What the people ate varied somewhat depending on the time of year. In the spring, they gathered bulbs and plant shoots. In the summer, they gathered seeds. In the

fall, they found acorns, and in the fall and spring, mushrooms. During the winter months, the people relied on the acorns they had stored for food. They also ate dried meat, dried vegetables, and seeds. Southern California people ate the blossoms and pods of the mesquite trees and shrubs. Pine nuts from pine cones were roasted or eaten raw, boiled into a mush, or ground and made into cakes. (Pine nuts, or pignolias, are available today at health food stores and some supermarkets. It would be fun for kids to sample some before and after roasting).

Although the people in parts of Southern California grew crops, including squash and pumpkin, most California people didn't farm, but gathered the plants they found growing in their area, such as miner's lettuce, nettle, wild onions, and bracken greens.

Many tribes intentionally burned fields or meadows. After burning, the ashes from the burning enriched the soil so that the following season the young plants grew stronger and more productively.

Baskets

Basket making was another important activity for women, and baskets from the California people were known for their beauty and intricacy. Possible uses for baskets were many, and the people used them for almost everything, including for carrying and storing food and other materials, as cooking utensils, trays, plates, bowls, and cups, and as works of art to be presented and cherished as gifts. Some baskets were made of twigs from willow and redbud, some were made of tule, and some were made from roots of sedge and bulrush. In some locations, different colors were achieved by dipping the material into wet ashes to make them black, or by using bark from the redbud tree to dye the material red. Grasses could also be dyed by soaking them in dark colored mud or in the juice of manzanita berries or onion skin. Shells and feathers also added color and beauty to the baskets. The colors and materials used in making baskets changed from place to place. Each tribe and each basket weaver had a unique style.

How did the people use baskets for cooking? Basket weavers were so skillful at weaving tight baskets that the baskets could hold water without leaking. To cook in the baskets, women heated round river rocks in the fire, washed the ash off them, then dropped them in a basket of uncooked acorn mush using looped sticks. To keep the rocks from burning the mush (and perhaps the basket), they stirred them around with special sticks. When the mush was cooked, the rocks were removed and the mush was ready! The women took the rocks out of the baskets and (in some locations) put them on a bed of fir boughs. The rocks would be covered by crusty, cooked acorn mush and kids would run to eat the crunchy crust off of the warm rocks.

Boats

Depending on the area, California Indians made three main types of boats: the tule boat, the dugout canoe, and the plank boat. Tule boats were made by tying large bundles of tules together with strong vines. Tule boats did not last long, and had to be pulled out of the water after use so they wouldn't get soggy.

A dug-out canoe was made of pine, cedar, fir or redwood logs which were hollowed out. The people burned the wood to make it softer, and then scraped it out with bone, shell, or rock, used like an adze. The sides and bottom had to be kept a certain thickness for the boat to work. These boats might take a year or two to make. Plank boats were made in Southern California. The Chumash and the Gabrielino people split pine logs into planks using bone wedges. These planks were then shaped, fastened with fiber cords, and sealed with pitch or asphaltum to make them watertight. Each boat could hold up to 20 people.

Other Resources

Obsidian is a hard volcanic glass that comes in colors of red, white and black, with black the most common color. Obsidian is found in volcanic areas, such as Lassen Peak, Mt. Shasta, and Clear Lake. But the people who didn't live near volcanos were able to get obsidian by trading with people who did have access to it. Another type of stone the people used was chert, a hard stone with a waxy look. Chert comes in blue, gray, green and red colors. Both types of rocks were used because they break with a sharp edge, and can be made into arrowheads, spears, and knife-like tools.

Trade

Trading was an important part of the people's lives. Trade made it possible for them to get goods that were not available in the area where they lived. California Indians had wide ranging trade routes, which extended even into Oregon, Washington and Nevada. These routes were the roads they took to exchange materials, goods, and ideas with other tribes.

The trade routes were trails from 6 to 12 inches wide, and they were kept clear by frequent use and by the efforts of all California Indians. Often they were lined with stones on both sides. The trails had places where the people could stop and rest, like the rest stops we have on our freeways today. Some of the trade routes the people used are still used today: Highways 1, 10, 36, 76, 78, 101, 126, 127, 138, 299, and 395, among others, follow original California Indian trails.

The people traded goods for goods (acorns for obsidian, for example) or they used strings of shells or magnesite instead of paper or coins for money. These strings were made of clam shell disks, magnesite cylinders (Clear Lake area, especially), or dentalium shells, and each string was valued at a certain amount and was carefully

counted out. Dentalium shells came from the state of Washington, near Vancouver Island. These shells were shaped like small tusks or teeth. Some traders had tattoos on their arms so they could measure each shell. The shells were sometimes decorated with fishskin, snake skin, and red feathers.

Clam shells were traded by the people of the coast. The shells were broken into pieces and each piece was ground on a rough stone until it was a smooth, round disc. Holes were made in the center with a sharp pointed stone.

Magnesite comes from the Clear Lake area. It is a stone which is not very hard and could be ground into small round pieces. The stone, when polished or heated, turned shades of red, pink, or gold. These stones were highly prized (Faber). If a woman wore many strings of any of these types of shell or stone money around her neck, it was a display of her family's wealth and power (Smith).

Other items that were in demand for trade include acorns, soapstone, bear grass, bow wood, salt, deerskins, pumice stone, dried furs, jasper points and asphaltum.

Impact of Newcomers to California

When other people came to California, they disrupted the Native Californians' traditional ways. The first new arrivals to California were the early Spanish explorers. Next came the Spanish missionaries, then Mexican rancheros with their herds of cattle and later, American entrepreneurs. These cattle competed for vegetation with the dwindling herds of antelope and elk. Successive waves of people poured into California hoping to profit from California's gold, agriculture and climate.

Each surge of newcomers brought increasing change and misfortune for Indian people and their cultures. Disease, killings and destruction of their way of life reduced the California Indian population dramatically during a span of less than 150 years. Some groups were completely destroyed. Ishi, an Indian of the Yahi people, became famous as the last of his tribe, but he was only one of many who saw their families and culture disappear.

California Indian Cultures

As many California Indians keep the traditions of their ancestors alive, a significant portion of their culture still survives. It is sometimes difficult for others to understand California Indian culture. Have you considered how difficult it would be for someone in the future to learn about you from some items in your closet or from a few of your kitchen utensils? It would be hard for them to really know you, or to understand your habits, dreams and personality. It takes a special effort to understand the people who used the objects you see in the museums. However, such effort is worthwhile, as we see how much we can learn from the people who have lived in California for thousands of years.

Native Plants and Their Uses[4]

California Wild Rose
(*Rosa californica*)

This scraggly bush or shrub, three to six feet tall, grows in moist areas. It has toothed leaflets and thorny stems. The showy flowers are light pink to rose in color, and have five petals. The wild rose blooms from May to August.

The California wild rose was used primarily by the California Indians in a medicinal tea. Made from the leaves and roots of the plant, the tea was used for colds, muscular aches and pains, and colic. It was enjoyed by healthy California Indians also, simply for its rich, fruity flavor.

The fruit and flower of the rose were eaten. The red fruit, called the rose hip, has a delicate, apple-like flavor, and is rich in vitamins A and C. The wood of the rosebush, if straight and strong enough, was used to make arrow shafts.

Cattail
(*Typha latifolia*)

The cattail is a rush-like plant, three to eight feet tall, with thick, spongy stems. The leaves are very long and slender. The reddish-brown flowers, called catkins, are a dense, sausage-shaped cluster on the top of the stem. Cattail is a common plant in marshes, streams, and ponds. It blooms from June to July.

The cattail was a very useful plant to the California Indians. The leaves were used to make mats and roofing thatch. Leaf sheaths were used as caulking material for canoes and houses. Much of the plant was eaten. Bread was made from the pollen of the catkin. Young shoots were eaten raw, tasting something like cucumber. The thick roots were dried, sometimes roasted, and ground into a meal that was very starchy and equal in food value to rice or corn. Thinner roots were used as a salad or cooked as a vegetable.

[4] Many of these plants are still gathered by California Indians for food and basketry materials. Contact your local Indian group for information about local plants they use.

Wild Cucumber
(*Marah macrocarpus*)

Wild cucumber is also called manroot, because its underground structure sometimes resembles a crouched human or a man's head. It has a basketball-sized root sometimes weighing over one hundred pounds. The large root contrasts with the rest of the plant, which twines around other plants, but is not a parasite. The fruit of this plant is a green, prickly gourd about three inches across. When ripe, it bursts open and scatters large brown seeds and soapy pulp over several yards. Wild cucumber is common in oak woodland, streamside areas, and the chaparral. It blooms with tiny, white, star-shaped flowers in the spring.

The roots of the wild cucumber are poisonous; the California Indians put crushed pieces in pools and streams to stupefy the fish. The crushed roots mixed with sugar were also applied to sores. Oil from crushed seeds was used as a hair tonic to prevent baldness.

Yerba Santa
(*Eriodictyon californicum*)

Yerba santa is a shrub that grows two to nine feet tall. Its leaves are long with wavy edges and have a varnished look. The plant also has funnel-shaped, lavender flowers. It is common in the chaparral, blooming from April to June.

Yerba santa was used to cure many ailments (the name means "holy herb" in Spanish). California Indians made a tea from the leaves and drank it to cure colds, coughs, sore throat, rheumatism, and stomach problems. They made a liniment from boiled leaves and rubbed it on the body to relieve aches and pains. This solution was also used by settlers to cure poison-oak rash. (Note: according to Edward Balls' *Early Uses of California Plants*, California Indians were resistant to poison oak rash, with some exceptions.) Fresh leaves pounded into a poultice and wrapped around wounds and broken bones reduced the swelling and relieved pain. Fresh leaves also made wonderful thirst quenchers—as they were chewed, their bitter, spicy taste disappeared and was replaced by a sweet, spicy taste. The mouth filled with moisture and became cool.

Blue Elderberry
(*Sambucus mexicana*)

Blue elderberry is a tree or large shrub (about 6 to 20 feet tall) which produces blue berries in the autumn. The leaves have tiny teeth and are divided into five to seven leaflets. The flowers are tiny and white and grow in showy clusters at the ends of the branches. The plant blooms from April to August. The flowers turn into edible, bluish berries.

The California Indians used many plants for more than one purpose. Some, such as the blue elderberry, provided food, wood, tools, medicine, dye, and even entertainment. The branches were used to make flutes, as well as bows and arrows. From the stems a black dye was made to decorate baskets. The berries were eaten, and the flowers and leaves were made into different types of medicines.

Because they used it to make flutes, the California Indians called the blue elderberry plant "the tree of music." To make the instruments, they cut the branches in the spring, removed the pulp from the inside of the branches and then dried them. When the branches were thoroughly dry, six to eight holes were burned into them with hot sticks. Bows and arrow shafts were made from the long, thin, green branches.

Elderberries were usually cooked before eating. Sometimes they were made into a drink, and sometimes they were dried and stored for winter. The plant was used as skin medicine, too. The flowers and leaves were boiled and applied to the skin to serve as a poultice and to relieve rashes.

California Bay Laurel
(*Umbellularia californica*)

This large shrub or tree can grow up to 100 feet tall. The leaves are dark green, smooth, and shiny. They have a very strong, spicy smell, especially when crushed. When held near the nose, the crushed leaves can produce headache, sinus pain, and sneezing in people who are sensitive to them. The wood of the tree is a distinctive yellow-brown color. The flowers, which are yellow-green, grow in small clusters and bloom from December to May. The nut-like fruit is dark purple and about one inch across. The bay laurel tree is common in canyons in the chaparral, in oak woodlands and along streams.

The California bay laurel was used as both food and medicine by the California Indians. The thin-shelled nuts, sometimes called pepper-nuts, were parched or roasted, then cracked and eaten. (They are too bitter to be eaten raw, but the bitter

taste disappears when the nut is roasted). Sometimes the nuts were ground into flour and made into small, bread-like cakes. Often they were stored for winter use.

Bay laurel is another plant that was used as medicine. The leaves, which are oily and pungent, were boiled into a tea, which was taken for stomach pains and headaches. Leaves were placed around the forehead also to relieve headaches. The leaves and stems were used in a hot bath to cure rheumatism. The oil of the leaves and seeds has anesthetic properties and was rubbed on the skin to relieve pain. The boughs were put on the fire, and the California Indians would breathe in the smoke to clear their nasal passages. The boughs had another interesting use—they were hung in the houses as a repellant against fleas and lice.

Toyon
(*Hetermeles arbutifolia*)

Toyon is a shrub or small tree that grows six to thirty feet tall. Its dark green leaves are two to four inches long. Tiny white flowers grow in bunches at the ends of the branches and become bright red berries in the fall. These berries have earned the toyon plant two other names—Christmas berry and California holly. Hollywood was named after this plant, which once covered hillsides there.

California Indians ate the toyon berries, but cooked them first, as they are bitter when raw. The berries were either boiled, baked in a ground oven for two or three days along with meat and vegetables, or tossed in a basket filled with hot rocks.

Toyon was also used as a medicine—a tea was made from its bark and drunk to relieve stomach ache.

Ceanothus
(*Ceanothus spp.*)

Ceanothus, also called wild lilac, is a shrub or small tree, two to twenty feet tall. It has small, oval-shaped, leathery leaves with blunt, sometimes notched tips. There are many species of ceanothus in California. They are common in the chaparral, especially on open slopes where there is good drainage. The tiny flowers—white, blue, or lavender—grow in clusters at the ends of branches and bloom in early spring, usually February, after the winter rains and before most of the other flowers appear.

Ceanothus flowers were used in an interesting way by the California Indians—as soap. Rubbing the flowers briskly on the skin produces a fine lather. Other parts of the plant were used, including the roots, which produced a red dye; the seeds, which were eaten; and the leaves, which were dried and smoked with tobacco. The flowers and leaves were also made into an excellent tea.

Chia
(*Salvia columbariae*)

Chia is a herbaceous (non-woody) plant which grows four to twenty inches tall. The leaves, which are lobed, grow in a rosette pattern at the base of the stem. The deep purplish-blue flowers grow in clusters at the end of the stem. Chia blooms in the spring and is found in chaparral, sagebrush scrub, desert, grassland, and oak woodland.

The California Indians gathered chia in great quantities when the seed was ripening. The plant was cut and bundled and brought to the village. The flower heads were bent over a flat, tightly woven basket and beaten with a basketwork paddle so that the seeds fell into the basket. They were then dried or roasted and ground into flour. This flour, called "pinole," was often mixed with the flour of other ground seeds or grains to give it a special flavor.

Chia is very high in food value and easily digested. Added to water, the seed made a refreshing drink. Less water produced a kind of gruel which could be baked into cakes or biscuits with a tasty, nutty flavor. It was said that a person could travel for twenty-four hours after eating only one teaspoonful of chia seed.

Map of California Indian groups is from Whispers of the First Californians by Gail Faber and Michele Lasagne, Magpie Publications, 1980. Used by permission.

Suggested Resources: California Indians

Aginsky, Burt W. and Ethel G. *Deep Valley*. New York: Stein and Day, 1967.

Allen, Elsie. *Pomo Basketmaking: A Supreme Art for the Weaver*. Naturegraph Publishers, 1972.

Austin, Mary Hunter. *The Basket Woman: A Book of Indian Tales*. Western Literature Series, 1999.

Balls, Edward K. *Early Uses of California Plants*. Berkeley: University of California Press, 1972. This small book identifies and describes those plants that were used by California Indians and explains how they were used.

Barrett, S.A., Ed. *Pomo Myths*. Bulletin of the Public Museum of the City of Milwaukee, WI. Vol. 15: 6 November 1933.

Bean, Lowell J. *Mukat's People: The Cahuilla Indians of Southern California*. Berkeley, CA: University of California Press, 1972.

Bibby, Brian, Ed. *The Fine Art of California Indian Basketry*. Sacramento, CA: Crocker Art Museum in association with Heyday Books, 2000.

Bibby, Brian. *Precious Cargo: California Indian Cradle Baskets and Childbirth Traditions*. Berkeley, CA: Heyday Books, 2000.

Breschini, Gary S. *Indians of Monterey County*. Carmel, CA: Monterey County Archeological Society, 1972.

Brusa, Betty W. *Salinan Indians of California and Their Neighbors*. Healdsburg, CA: Naturegraph Publishing Company, 1972.

Caduto, Michael J. and Joseph Bruchac. *Keepers of the Earth: Native American Stories and Environmental Activities for Children*. Golden, CO: Fulcrum, Inc., 1989.

California History. Published quarterly by the California Historical Society, 2099 Pacific Avenue, San Francisco, California 94109.

California Indian Museum Program, Film, Revised 6/1/89.

Chapin, Ray. *The Grizzly Bear in the Land of the Ohlone Indians*. Local History Studies. California History Center. Summer, 1971.

Chestnut, V. K. "Plants Used by the Indians of Mendocino County, California." Contributions from the U.S. National Herbarium. 1974. Vol III, p. 295-422.

Conrotto, Eugene L. *Miwok Means People: The Life and Fate of the Native Inhabitants of the California Gold Rush Country*. Fresno, CA: Valley Publishers, 1973.

Cook, Sherburne F. *The Conflict Between the California Indian and White Civilization*. Berkeley: University of California Press, 1976.

Culin, Stewart. *Games of the North American Indians*. New York: Dover Publications, 1975. Useful in developing programs involving participation. Well illustrated, explains how games were played.

Curry, Jane Louise. *Back in the Before Time: Tales of the California Indians*. New York: M.K. McElderry Books, 1987.

de Angulo, Jaime. *Coyote's Bones*. San Francisco: Turtle Island Foundation, 1974.

de Angulo, Jaime. *Don Bartolomeo*. San Francisco: Turtle Island Foundation, 1974.

de Angulo, Jaime. *The Lariat*. San Francisco: Turtle Island Foundation, 1974.

Downs, James F. *The Two worlds of the Washo: An Indian Tribe of California and Nevada*. New York: Holt, Rinehart and Winston, 1966.

Eargle, Jr., Dolan H. *Native California Guide: Weaving the Past & Present*. San Francisco, CA: Trees Company Press, 2000.

Faber, Gail and Michele Lasagne. *Whispers from the First Californians*. Alamo, CA: Magpie Publications, 1980. Highly recommended—excellent teacher's guide. Includes illustrations, maps, games, stories, and plenty of well-researched information.

Fagan, Brian. *Before California: An Archeologist Looks at Our Earliest Inhabitants*. New York: Rouman & Littlefield Publishers, Inc., 2003.

Forbes, Jack D. *Native Californians of California and Nevada: A Handbook*. Healdsburg, CA: Naturegraph Publishing, 1969.

Godfrey, Elizabeth. *Yosemite Indians*. Yosemite Natural History Association, 1973.

Grant, Campbell. *The Rock Paintings of the Chumash*. Berkeley, CA: University of California Press, 1965.

Harrison, Wendy. "Bountiful Land: A Guide to the Miwok Plant Trail." Chaw'se Association, 1991.

Heizer Robert F., Ed. *The Destruction of California Indians*. Santa Barbara, CA: Peregrine Smith, Inc., 1974.

Heizer, Robert F., Ed. *Handbook of North American Indians*, Volume 8: California. Washington D.C.: Smithsonian Institution, 1978.

Heizer, Robert F. and Albert B. Elasser. *The Natural World of the California Indians*. Berkeley: University of California Press, 1980.

Heizer, Robert F. and A.E. Treganza. *Mines and Quarries of the Indians of California*. Ramona, CA: Ballena Press, 1972.

Heizer, Robert F. and M.A. Whipple. *The California Indians*. Berkeley, CA: University of California Press, 1971.

Hill, Dorothy. *The Indians of Chico Rancheria*. State of California, The Resources Agency, Department of Parks and Recreation, 1978.

Hubbard, Fran. *A Day with Tupi - An Indian Boy of the Sierra*. Fresno, CA: Awani Press, 1956.

James, George W. *Indian Basketry*. New York: Dover Publications, 1972.

Knudtson, Peter. *The Wintun Indians of California and Their Neighbors*. Happy Camp, CA: Naturegraph Publishers, 1977.

Kroeber, A.L. *Handbook of the Indians of California*. New York: Dover Publications, 1976.

Kroeber, T. and R.F. Heizer. *Almost Ancestors: The First Californians*. Ballantine, in cooperation with the Sierra Club, 1968.

Kroeber, T., R.F. Heizer, and A.B. Elasser. *Drawn From Life: California: Indians in Pen and Brush*. Socorro, NM: Ballena Press, 1985.

Kroeber, Theodora. *Ishi, Last of his Tribe*. Berkeley, CA: Parnassus, 1964.

Kroeber, Theodora. *The Inland Whale*. Berkeley, CA: University of California Press, 1959.

Latta, F. F. *Handbook of the Yokuts Indians*. 2nd Ed. Oildale, CA: Bear State Books, 1949.

Ludwig, Edward W. *The California Story: A Coloring Book.* Los Gatos, CA: Polaris Press: 1978.

Margolin, Malcolm. *The Ohlone Way: Indian Life in the San Francisco - Monterey Bay Area*. Berkeley, CA: Heyday Books, 1978.

Margolin, Malcolm. *The Way We Lived: California Indian Stories, Songs & Reminiscences*. Berkeley, CA: Heyday Books, 1993.

Margolin, Malcolm. *Native Ways: California Indian Stories and Memories*. Berkeley, CA: Heyday Books, 1995.

Mason, Otis T. *Aboriginal American Indian Basketry*. Santa Barbara, CA: Peregrine Smith, Inc., 1976.

Masson, Marcelle. *A Bag of Bones: Legends of the Wintu Indians of Northern California*. Happy Camp, CA: Naturegraph Company, 1966.

Murphey, Edith V. *Indian Uses of Native Plants*. Mendocino County Historical Society, 1959.

Ortiz, Beverly. *It Will Live Forever: Traditional Yosemite Acorn Preparation*. Berkeley, CA: Heyday Books, 1996.

Powers, Stephen. *Tribes of California*. Berkeley, CA: University of California Press, 1976.

Purdy, Carl. *Pomo Indian Baskets and Their Makers*. Ukiah, CA: Mendocino County Historical Society, 1975.

Rawls, James J. *Indians of California: the Changing Image*. Norman: University of Oklahoma Press, 1986.

Raymond, L. and Ann Rice. *Marin Indians*. Sausalito, CA: Pages of History, 1957.

Simpson, Richard. *Ooti: A Maidu Legacy*. Millbrae, CA: Celestial Arts, 1977.

Smith, Elinor S. *Po-ho-no and Other Yosemite Legends*. Monterey, CA: Peninsula Print Co., 1927.

Other Sources of Information

Four Directions Institute. www.fourdir.com.

California Historical Society. "California History Online." www.californiahistory.net.

California Indian Basketweavers Association. www.ciba.org.

California Indian Heritage Center. www.parks.ca.gov/?page_id=22628.

California Indian Museum and Cultural Center. www.cimcc.indian.com.

Native American Heritage Commission. "California Native Americans." ceres.ca.gov/nahc/cna.html.

National Museum of the American Indian. www.nmai.si.edu.

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